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U. S. Department of Agriculture

*TO YOU WHO HAVE TAKEN TO
HUNTING & FISHING:*

**THE WISCONSIN AQUATIC NURSERIES
OSHKOSH, WISCONSIN, U.S.A.**





2

OF

BO

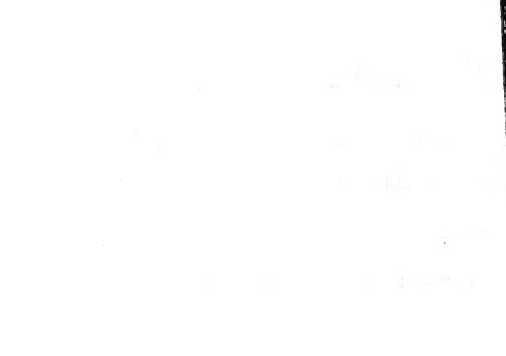
B

20% DISCOUNT

**OFF THE PRICES LISTED IN THIS
BOOK ON ALL ORDERS PLACED**

BEFORE.....,

EXCEPT WILD RICE SEED





You Can Enjoy

BETTER HUNTING and FISHING

Thousands
of Wild Ducks

Will

Come to the
Waters Where

Their Natural
Foods Grow

Game Fish

Reproduce

Faster and

Grow Larger

In Waters

Having a

Proper Aquatic

Plant Growth

"All together—Heave"



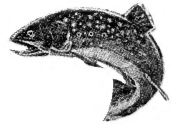
"THIS world has never known a country equal to ours in size, having greater natural beauty or conformation, diversity of scenery and wealth of animal and plant life.

"Only as a day in the evolution of the world is 300 years, and after this length of time, *we, today*, are called upon to answer for our stewardship of plethora of riches and beauties. We have handled these natural wonders, this profusion of riches in a spirit of insane recklessness. . . .

"Today we are squarely facing the problem of reparation for we must make reparation or we must meet disaster. There is no question of whether we will or not, we must as a matter of protection. . . .



Sportsmen have responded exceeding well to the urge (above) as written by the late Gene Stratton Porter. Many depleted water areas have been replaced and other new grounds inundated. Migratory waterfowl are again on the increase. Hunting and fishing grounds are being developed daily. Do your part now to perpetuate these great sports. The following pages will be most helpful to you.



"We must save every brook and stream and lake. . . .

"We must save the natural resources which remain to us. . . .

"If we desire comfort, food and beauty for ourselves and any sort of a heritage at all to bequeath to our children each of us must lend a hand. Those of us who see the vision and most keenly feel the need must furnish the motive power for those less responsive. . . .

"It is time for all of us to get together and in unison make a test of our strength. . . .

"One man could not do this work nor could two or three but working in unison for the same purpose many men could do it. . . .

"All together—Heave."

THE WISCONSIN AQUATIC NURSERIES
OSHKOSH, WISCONSIN

Foreword



A PRACTICAL game restoration program. In the following pages of this booklet are given suggestions and helpful ideas derived thru years of experience by specialists on the development of attractive places for Waterfowl, Fish, Muskrats and Upland Game Birds. How to propagate natural food and cover plants there-by improving the Hunting on both land and waters and better the Fishing in ponds and streams.



Like the Indians of old who wandered over prairie, mountain and stream in search of food to the better hunting grounds, so do the wild life migrate in search of the kinds of foods they like. Similar to the human being, they like a change of diet or a variety of foods, some species of wild life prefer certain foods more than others as the Mallard Duck searches for the Wild Rice so does the Canvas-back Duck scan the water for Wild Celery. Again in comparison, as the people populate the rich lands of Illinois near the great blue waters of Lake Michigan, against, the sandy deserts of Arizona. Why? Because in the land of plenty they find contentment, plenty of food, shelter and enjoyment with the least exertion. It's the same with wild waterfowl, fish or game. Great numbers will congregate where they

find a plenty of their favorite foods, good cover, greater protection and the easier feeding conditions.



SUPPOSE!

Just suppose you had a pasture with sufficient feed growing to keep one hundred cattle throughout the season.

Suppose instead of one hundred that you turned one thousand head in there to feed.

What would happen?

They would either starve or break out and wander into other fields where food is more plentiful.

IT'S THE SAME WITH WILD DUCKS OR OTHER GAME

When the Wild Ducks stop on your waters or the game at your preserve and find little or no food, they go on their way in search of better feeding grounds, but if they find plenty of their natural foods growing there you can't drive them away.

To have the best of Hunting or Fishing all that is necessary is to start a growth of their favorite foods.





Provide cover and give them a chance, they will do the rest. Soon you will have game or fish in abundance. One planting of these hardy perennials makes a permanently attractive place.

GOOD PLANTING MATERIALS IMPORTANT

Aquatic seeds, tubers and plants are of a perishable nature and must be carefully handled by persons experienced in growing, handling and planting them to insure the expected results. Poor materials are a waste of time and money, no matter how cheap they may be. We have learned of many failures in growing Wild Rice and other aquatic materials were due to the fact that the seeds and tubers planted had been improperly handled by some amateur seedsman or naturalist who did not know how to care for same. Worthless materials were acquired.

PIONEER AQUATIC NURSERYMEN

You can depend upon the Wisconsin Aquatic Nurseries with years of experience. We are the first and oldest of aquatic nurseries. Mr. Coon, the owner of this firm, is one of the originators of this business with wider field experience than any other expert in the field. He will gladly give his personal help thru mail without charge.

GROWN TO SUIT YOUR CLIMATE

Our materials are grown on properties from the far north to the extreme south to meet all conditions and climates. These seeds, tubers and plants are produced on twelve different properties located in various parts of the United States and Canada from the Gulf of Mexico to the interior of Canada and the Pacific Coast to Atlantic Ocean.

During our years of specializing in the development of more attractive feeding and breeding grounds for waterfowl, fish and game, we have studied the habits and haunts of this wild life. We have examined the contents of thousands of stomachs to determine their principal foods and studied the propagation of the natural foods of prime importance.



On the following pages it tells what, where, when and how to plant these natural foods. How to improve your hunting on waters or in the field. How to increase your sport with rod and reel.

The Wisconsin Aquatic Nurseries,
P. O. Box 331, Oshkosh, Wisconsin.

SPRING PLANTING PRODUCES RESULTS THIS YEAR

During spring is the ideal time to plant aquatic vegetation. It starts immediate growth and you will reap the benefit by next fall in more wild ducks and better shooting. Same is true of the aquatic plant life for game fish, a spring planting will aid the small fish produced this same year.

AQUATIC PLANTS ARE PERMANENT

Once you have a growth of aquatic plants established in those waters they will be permanent, reproducing for years to follow. The various kinds of aquatic plant life reproduce in different ways, by seeds, running roots, and tubers.


\$5.00 PLANTS AN ACRE

The average cost of sufficient materials to start an acre of aquatic plants is about Five Dollars. Some kinds cost more and others less. However the first

Improve your **DUCK HUNTING**
and Fishing

NATURAL FOODS
Should be Planted Now!

WISCONSIN AQUATIC NURSERIES
P. O. BOX 331
OSHKOSH, WIS., U. S. A.



cost is the only cost, for they are perennials. It is not necessary or advisable to plant your entire water area, just start a growth in the desired place and it will spread in its proper water depth.

DO NOT FEAR CHOKING WATERS

Most aquatic plants only grow in certain depths of waters. Those that will thrive in deeper waters grow submerged, the tops being several feet below the water's surface.

WILD RICE

TO LURE THE MARSH DUCKS

Mallards, Pintails, Blackducks, Teal, Widgeon and Canada Geese fly hundreds and hundreds of miles to the Wild Rice Marshes. During Fall they find the ripened grains in great abundance, also shelter and hiding places among the tall growth. If there are several Wild Rice Marshes in the vicinity, great numbers of these waterfowl will be seen passing from one marsh to the other. In the north only the freezing water will drive them out. Farther south they will stay on these good feeding grounds throughout the entire winter. Wild Rice is also very important as a Muskrat food.

A field of Wild Rice once established makes a permanent feeding ground, for Wild Rice reseeds itself from year to year.

WHERE TO PLANT

The best places for planting wild rice are in fresh water streams, sloughs, marshy lakes or ponds, having an outlet, soft mud bottom and waters from 6 inches to 3½ feet in depth. In sunny sheltered bays or coves on larger lakes, streams or rivers where it is protected from waves or strong currents are excellent places to plant. If planted upstream, parts of the plants and some of the seed produced, will be carried downstream each year, and become established in suitable places all along the waterway.

Near the seacoast wild rice will thrive in streams where the waters are not salty to taste and where the tide is not over four feet. Tame rice fields that depend on tides for their water supply are usually very good places for growing wild rice, or in old abandoned rice fields where there is a change of water.

Wild Rice is easy to grow. It does very well in Canada and the northern states above the Mason-Dixon line. It has proven a success in a few of the southern waters where conditions were nearly exact. A free change of fresh water is the main requirement.

PLACES NOT SUITABLE

Years of experience has taught us that Wild Rice does not do well in landlocked lakes or ponds (those having no outlet) waters salty to taste, strongly alkaline or on white marl bottom soil. Such places as along the Mississippi River and its tributaries where the water rises and stays ten feet or more above the low water mark for several weeks during spring are also unsatisfactory. Wild Rice will be drowned



Wild Rice Head
(Zizania Aquatica)

out by such a condition. If conditions such as described exist in your waters then we suggest the planting of other duck foods which are suited to such places, find them described on the following pages.

WHEN TO PLANT

In Southern waters Wild Rice Seed may be planted from January to June. In the North as soon as the waters are free from ice during spring. We suggest planting as early as possible to give it full advantage of the entire growing season so that the expected results may be obtained by fall, fully ma-



A Wild Rice Bed 45 Days After Planting

tured plants, lots of feed and plenty of ducks. Good seed is important, we supply only the best, hardy Giant Wild Rice Seed, guaranteed to grow.

HOW TO PLANT

Wild Rice seed is very easily planted, all that is necessary is to broadcast the seed on the waters ranging in depth from 6 inches to 3½ feet. Plant where there is a fairly rich bottom soil, scattering about one handful of seed to each two or three square yards. The seed will immediately sink to bottom and within a short time will bury itself in the bottom soil. We urge you to plant early as possible for in late spring the seed is inclined to sprout which makes it necessary to mix the seed with mud in order to sink it to bottom. Sprouted seed will float on the waters and is more bothersome to plant.

Our supply of wild rice seed is very limited, therefore, we suggest that you place your order early and be sure of your supply. We will store your seed until you wish shipment. Complete planting instructions are sent with each order. Thirty pounds will plant an acre.

Price \$0.60 per pound, quantities of 10 pounds or more. \$0.65 per pound quantities less than 10 pounds. Young Wild Rice Plants \$12.50 per 1000.

F. O. B. Oshkosh—add 10c per pound for postage if desire shipment prepaid.

WILD CELERY

BRINGS THE DIVING DUCKS

Canvas-backs, Redheads, Bluebills, etc., darken the sky over the wild celery beds. A few years ago it was no trick at all to go out and get the limit of those big old Canvas-backs and Redheads, neither is it today where the Wild Celery beds abound. But, many of the vast Wild Celery beds of former years have disappeared; drainage, pollution and other causes have destroyed many and many an acre of them. We must utilize every lake, pond and stream to prolong this sport.

You will find no better way to increase your enjoyment during your hours of recreation than shooting these leery old divers. Thousands of them can be attracted to your local waters by establishing a growth of Wild Celery.

All parts of the plant are eaten by the Wild Ducks, but the tender winterbuds and rootstocks are relished most. Once the Wild Celery is established in your waters it will grow there permanently. There is no danger of the ducks destroying the growth for there are many tubers which break off remaining in the mud and many plants never molested which will produce the following year. All kinds of wild duck like wild celery.

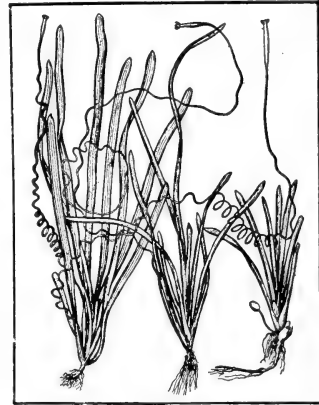
IMPORTANT FOR FISH

Wild Celery being a submerged water plant is also important as a food and cover plant for fish.

The plants support countless numbers of minute insect and animal life which fish depend upon for food. Fish also eat portions of the plants themselves. A bed of Wild Celery will keep your waters pure and clear and well oxygenated, which is important for fish life. The plants provide shelter and hiding places for young fish, where they can escape from their enemies, assuring many more of them reaching maturity. Wild Celery is an excellent winter food for Muskrats.

WHAT AND WHEN TO PLANT

The Wild Celery propagates in three ways, by seed, runners and winterbuds, a sort of tuber. It is by planting these winterbuds (tubers) during the months of April, May and June that one can establish a quick and very good growth of Wild Celery in their waters. Results may be noticed by the following fall.



Wild Celery (*Vallisneria Spiralis*)

WHERE TO PLANT

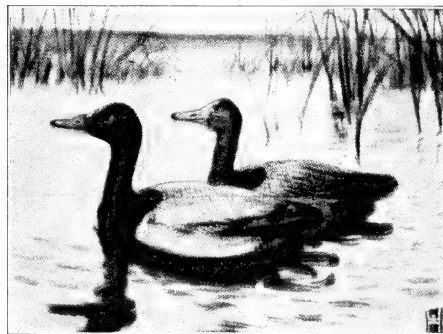
Wild Celery grows best in waters from 2 to 10 feet in depth preferably on a mud bottom, although it will grow on sandy loam or clay. It requires fairly fresh waters, that is waters which are not real salty or strong alkaline.

HOW TO PLANT

The simplest and best way to plant Wild Celery is with 8 penny nails and No. 8 rubber bands. Just loop the small rubber several times over the nail head to take up the tension, next slip 2 of the tubers under rubber, they are then ready to plant. After a quantity has been made take them to the desired planting place and drop one by one into the waters about 3 to 6 feet apart. We furnish more complete planting instructions with each order.

One Thousand Tubers plant one Acre.
Price \$10.00 per 1,000; \$1.50 per 100 Tubers.

Prepared for Planting with Nails
Price \$15.00 per 1000; \$2 per 100 Tubers.



Canvas-back (Aristonetta Vallisneria)

Southern Grown Wild Celery Plants
Price \$22.50 per 1000 Plants; \$3.00 per 100 Plants

Good hunting or good fishing is no longer a gift of the gods. The plain and simple fact is that you find hunting and fishing where there is sound and constructive food and cover propagation work being done.

SAGO PONDWEED

BEST ALL ROUND DUCK FOOD

Early in the season the Sago Pondweed will attract Mallards and Teal, later the Canvas-backs and other divers. It's the most important of water plants for both wild ducks and fish. All species of wild ducks feed upon its roots, tubers and seeds which are produced in abundance. In fact all parts of the plant are eaten by the wild ducks, but they cannot destroy the growth for it has a very strong root system which makes a net work thru the bottom soils. Many roots and tubers remain unmolested to produce a growth the following year. One planting will make a permanent growth. Sago Pondweed produces more food for the Wild Ducks than any other aquatic plant. It is also an important food plant for the Muskrats.

EXCELLENT FOR FISH

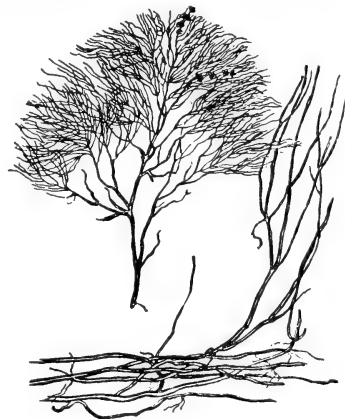
Like the Wild Celery the Sago Pondweed also provides food, cover and protection for the fish. It purifies and clarifies the waters, takes up the poisonous gases and puts forth oxygen into the waters. Various kinds of insect life deposit their larva on these plants which is food for the small fish. The Sago Pondweed plants shade and cool the under waters and will not only improve the fishing but also the quality of the fish.

WHAT AND WHEN TO PLANT

The tubers of Sago Pondweed should be planted during April, May and June. They will produce food for the Wild Ducks the following Fall. These plants have a very strong root system and are indestructible by Carp.

Government Indorsement

U. S. Department of Agriculture Bulletin No. 634 says that Sago Pondweed is probably the most important single waterfowl food plant on the continent and is responsible for about half, or more, of the total food percentage credited to the genus *Potamogeton*.



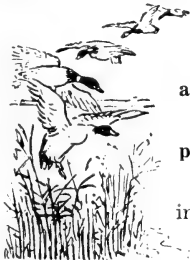
Sago Pondweed (*Potamogeton pectinatus*)

WHERE TO PLANT

These plants are very hardy and will grow in almost any waters except salt waters. On practically every kind of bottom soil except gravel. They are submerged plants and do best in waters from 2 to 6 feet in depth, altho Sago Pondweed will grow in water from 1 to 10 feet in depth. When possible plant where there is some mud.

HOW TO PLANT

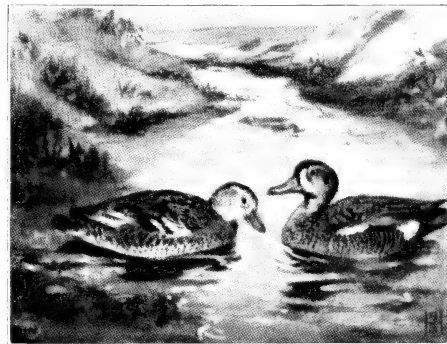
The tubers are planted in the same manner as Wild Celery tubers (see how to plant on page 9). Complete planting instructions are furnished.



One Thousand Tubers will plant an Acre.

Price \$12 per 1,000 tubers, \$2.00 per 100.

The quantity of food that grows in any waters governs the number of wild ducks that can stay there as well as the length of their visit.



Blue-Winged Teal (*Querquedula Discors*)

Ducks Are Effective In Mosquito Control

Mallard ducks are efficient as a mosquito control agency, Texas Game Department biologists say. They eliminate most of the larvae of the insect, even from the most badly infected places.—From the National Wildlife Federation.

WAMPEE—DUCK CORN

A good Wild Duck Coaxer. Southern or Northern grown. Marsh ducks are particularly fond of the Wampee Seeds which shell off the stock in late fall like kernels of corn shelled from the cob. It will help hold the Mallards and other shallow water feeders after many other foods are gone.

WHEN AND WHERE TO PLANT

Wampee Plants or Seed may be planted during March thru June. They grow in wet marshy boggy places or on fairly rich mud bottom in waters from 1 inch to 1 foot in depth. Plant them in the shallow waters of any lake, pond or stream.

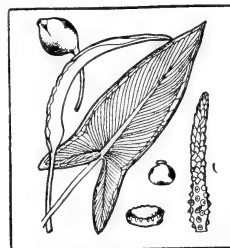
HOW TO PLANT

Just step into your rubber boots and take a spade or spading fork and a quantity of plants to the place you intend planting. With the spade or fork lift a bit of soil, then place the roots of the plant into the opening after which replace the soil and step it in firmly with your boot.

Wampee Seed may be planted by mixing same with a good sticky clay and scattering small parts of the mixture here and there in the shallow waters.

If it is your desire to plant this seed in a wet marshy place, simply make a hole with a stick, drop in several seeds and step the soil together closing the hole. We will furnish complete planting instructions with order. Five hundred plants or ten pounds seed will plant an Acre.

Price \$5.00 per 100 plants; \$45 per 1000—\$0.60 per pound seed.



Wampee
(*Peltandra Virginica*)

Natural Foods are the secret of attracting large numbers of waterfowl, fish or game and holding them over an extended period. Make a liberal planting now.

WILD DUCK MILLET

(*Echinochloa Crusgalli*)

ATTRACTS THE SHALLOW WATER DUCKS

Also known as Goose Grass. Ranks almost as high as Wild Rice as a good Duck Coaxer in localities where Wild Rice cannot be grown. Wild Duck Millet grows to be 4 to 6 feet high and makes very good blinds as well as producing a large seed head with an abundance of food for the Wild Ducks.

SMARTWEED

(*Polygonum Pensylvanicum*)

A popular food with the Mallards. On the lowlands where Smartweed grows, from Canada to the Gulf, Mallards will surely stop during their fall flight. They are particularly fond of feeding upon Smartweed in places where overflow in fall, where they may dibble the seeds from the mud in shallow waters.

IMPORTANT FOR QUAIL

Both the Wild Millet and Smartweed are considered as important food plants for upland game birds. They produce an abundance of seeds which Quail and Grouse are very fond of. In studying the habits of the game birds we find that twice daily they go to the nearby ponds or streams for water and like to linger there and feed.

WHAT AND WHEN TO PLANT

Seeds of both Wild Duck Millet and Smartweed may be planted during months of May and June.

WHERE TO PLANT

The Wild Duck Millet and Smartweed grow under similar conditions on damp lowlands and mud flats. They have proven very good along the Illinois and Mississippi Rivers, also on old Rice fields and in such places as can be flooded during the duck season. They do best on a fairly rich soil.

HOW TO PLANT

It is well to break the soil where possible. One may use a drag, disc or grub hoe. Then sow the seed broadcast, after which drag or rake the planted area so as to cover the seed.

Forty pounds will plant one acre.

Wild Duck Millet Seed, Price \$10 per 100 lbs.; per pound, 14c.

Smartweed Seed, Price \$12 per 100 lbs.; per pound, 16c.

Fifty pounds at 100 rate.



Wild Duck Millet
Seed Head

WATER SMARTWEED

(Polygonum Ampliebium)

Wild Ducks like the seeds of Water Smartweed, particularly Mallards, Blacks, Pintail and Teal. They have to work hard to find the meaty black seeds in the soils and helps to hold these ducks on your waters.

WHEN AND WHERE TO PLANT

Water Smartweed may be planted from March through July. It will grow in wet soils or shallow waters, preferably on a mud bottom soil. Due to it being very hardy it will grow in either northern or southern climate. Waters that are fresh, moderately acid or mildly alkaline are ideal.

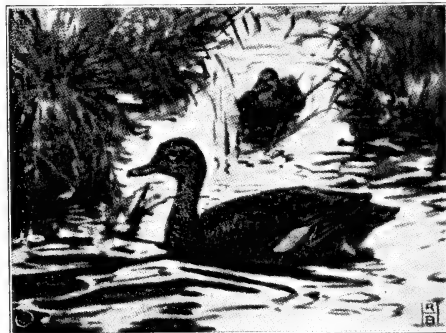
HOW TO PLANT

The Water Smartweed reproduces by both seeds and roots. Seeds being difficult to store and preserve the germination of, we therefore recommend the planting of root sections, for quick and good

results. Just fasten the root to a 8 penny nail with a No. 6 rubber band (see how to plant Wild Celery) and drop in the waters at the desired place for growth. They will take hold promptly.

PRICE

1,000 Roots	\$25.00
100 Roots	3.00



Black Duck (Anas Rubripes)

BANANA WATERLILY

(Castalia Mexicana)

This is a very fine all around wild duck food for warm climate. It does not do well in the North. Banana Waterlily plants are grown on our southern nurseries for planting in southern waters. All kinds of Wild Ducks, either shallow feeders or divers feed upon this plant. The seeds buds, tubers and runners are eaten, in fact all parts of the plant have been found in duck's stomachs.

WHEN AND WHERE TO PLANT

Young plants of the Banana Waterlily can be planted at any time of the year. A soft mud bottom is preferable, where the waters remain from one foot or five feet in depth. Once growing in those waters, they will be permanent. Are also very ornamental, and valuable for game fish.

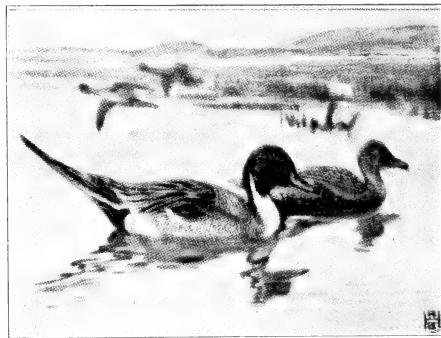
HOW TO PLANT

The root stocks are easily planted. Just fasten a 40 or 60 penny nail to each with a No. 8 rubber

band. The nail is simply an anchor and will hold them to bottom until the roots take hold in the soil.

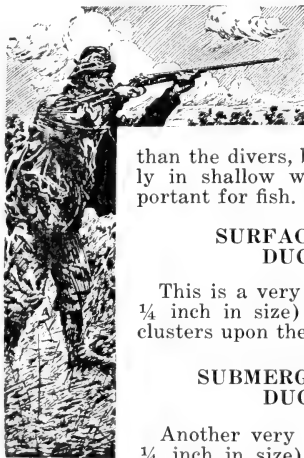
PRICE

1000 Root Stocks	\$85.00
100 Root Stocks	10.00



Pintail or Sprig (Dafila Acuta Izitzihoa)

DUCKSMEAT OR DUCKWEEDS



All kinds of Wild Ducks feed upon the Ducksmeat. The shallow water feeders make up a larger percentage of their food of this plant

than the divers, because it grows largely in shallow waters. It is also important for fish.

SURFACE FLOATING DUCKSMEAT

This is a very small plant (less than $\frac{1}{4}$ inch in size) which floats in great clusters upon the surface of the waters.

SUBMERGED FLOATING DUCKSMEAT

Another very small plant (less than $\frac{1}{4}$ inch in size) which floats in great masses, submerged near the bottom.



WHAT, WHEN AND WHERE TO PLANT

The above plants grow under very similar conditions and are transplanted in the same manner during the months of June to October. These plants should be transplanted into fresh waters from 1 to 6 feet in depth on any kind of bottom in ponds or quiet sheltered bays and coves. The above plants are indestructible by Carp.

HOW TO PLANT

Just drop a handful of plants into the waters about every two feet.

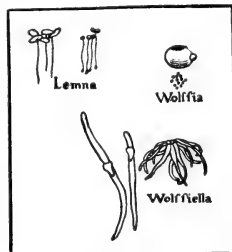
Five bushels of plants to the acre.

Surface Ducksmeat

Price, \$2 per bushel plants.
\$1.75 per bushel 10 bu. lots.

Submerged Ducksmeat

Price \$4 per bushel plants.



Ducksmeat

COONTAIL PLANTS

Seeds of the Coontail Plant are eaten by many species of Wild Ducks, they also feed upon the foliage. This plant provides both food and cover for fish. Its a rapid growing plant and makes considerable food in a short time.



Coontail
(*Ceratophyllum Demersum*)



WHAT, WHEN AND WHERE TO PLANT

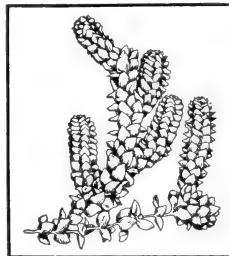
Planting of these two kinds can be made from April to October. They grow best on a mud bottom in one to five feet of water, preferably in small ponds, sloughs or quiet bays on larger lakes. Just lay a handful of plants on the waters and push them into the bottom soils with a paddle.

PRICE

\$2.00 per bushel plants.
1.75 per bushel in 10 bushel lots.

ELODEA

The Elodea is of value as a food plant for marsh ducks. It has a great value as a food and cover plant for fish. It is also a very good water purifier. Like the Coontail it grows very rapidly. Once growing in those waters it will be permanent.



Elodea
(*Anacharis Canadensis*)

DEEP WATER DUCK POTATO

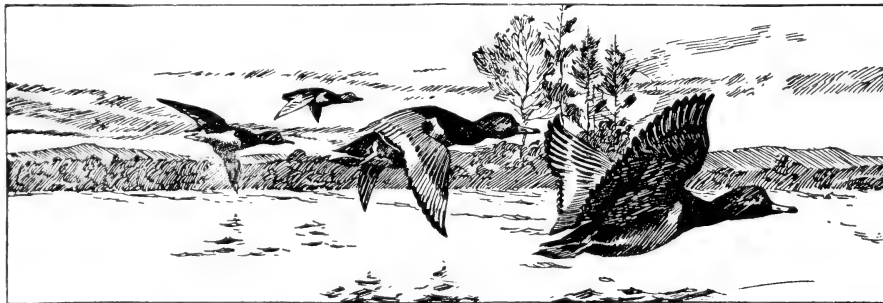
(*Sagittaria Rigida*)

Another favorite food for all kinds of Wild Ducks. The diving ducks feed on it during fall in the deeper waters. Shoal water ducks eat it if the waters are low during fall. It is a rapid grower and produces abundantly of food. It has numerous acorn like tubers on its roots just beneath the bottom soils which the Wild Ducks glut themselves with. One can hardly drive the ducks away from a good bed of Deep Water Duck Potatoes and if they

do leave it is only temporary, they soon return for more.

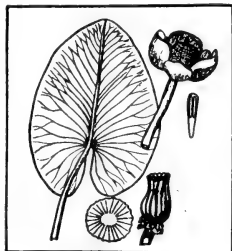
Plant the tubers during spring or summer in from one to five feet of water. A soft mud bottom is best and will produce a luxuriant growth this year. They are very hardy and will thrive in any fresh water lake, pond or stream. Changing water levels do not affect the growth of these Duck Potato plants.

In planting deep water duck potatoes just fasten the tuber to an eight penny nail with a small rubber band and drop them in the waters in the desired place. One thousand tubers plants one acre.



PRICE

Deep Water
Duck Potato tub-
ers \$12.00 per
1000; \$1.50 per
100.



Spatterdock
(*Nymphaea Advena*)

WATERLILIES

SPATTERDOCK

Also known as Yellow Waterlily make a fine Wild Duck attraction when planted in addition to other natural foods. Marsh Ducks feed upon the seeds in early fall.

Spatterdock is considered an excellent winter food for the Muskrat as it grows in waters at a depth beyond the freezing point.

WHITE WATERLILY

An excellent food and cover plant for fish. White Waterlilies are very ornamental and will add to the beauty of your waters. Wild Ducks eat its seeds.

AMERICAN LOTUS

Has value as a food and cover plant for fish and is also of value as a wild Waterfowl food. American Lotus is very ornamental having large cream color flowers.

WHEN AND WHERE TO PLANT

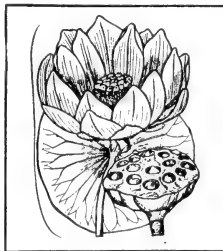
Tubers or rootstocks of Spatterdock and White Waterlilies are planted during May to October. Seed of the American Lotus may be planted at any time.

All waterlilies do best on a mud bottom in waters from 1 to 4 feet in depth.

HOW TO PLANT

Tubers and rootstocks are very easily planted. Cut a fairly straight stick about 5 feet in length which is between 1 and 2 inches in thickness. Whittle off one side at end to make a flat surface, then drive two nails into this flat surface on a slant to make a sort of crotch. Place a tuber into this crotch and push it into the mud about 3 or 4 inches. Plant these about 3 feet apart. These tubers are usually planted from a boat.

Seven hundred tubers will plant one acre.



Lotus Waterlily
(*Nelumbo Lutea*)

American Lotus seed is simply broadcast using 10 lbs. to plant an acre.

PRICES

White Waterlily Tubers \$6 per 100; Spatterdock Roots \$12 per 100; American Lotus Waterlily Seed \$0.40 per pound; American Lotus Plants \$30 per 100; White Waterlily Root Stocks \$10 per 100; Castalia Minor Plants \$25 per 100.

WAPATO DUCK POTATO

RAPID GROWING DUCK COAXER

The Wapato Duck Potato is a very good all around Wild Duck Food. Canada Geese and Swan are also very fond of this plant. The species of Wild Ducks which will feed upon Wapato depends largely upon the water conditions under which it grows. If the waters remain nearly the same level the year around, Mallards and other shallow water ducks will feed upon the tender shoots, tubers and seeds which it produces. In places where there is an overflow or the water deepens during fall and winter, Canvas-backs and other divers will feed upon Wapato.

As a Muskrat food the Wapato is considered among those of the most importance and is often called Rat Potato.

WHAT AND WHEN TO PLANT

Wapato propagates largely by tubers which should be planted during April, May and June. Tubers planted in spring will produce fully matured plants the following fall.

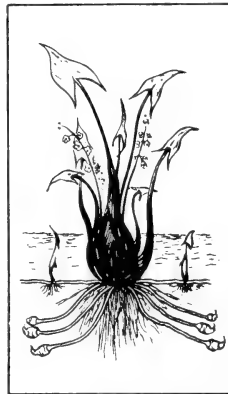
WHERE TO PLANT

This plant is very hardy and will grow well in most any inland waters excepting those which are very strong of alkali or salts. It does the best in a fairly rich soil on damp lowlands, mud flats or in water from 1 inch to 1 foot in depth.

HOW TO PLANT

The tubers of the Wapato Duck Potato are very easily planted, all that is necessary is to step into your boots or waders and take a quantity of tubers to the place you wish to plant. Then push each tuber about one or two inches deep into the bottom soil, planting about three feet apart. More complete planting instructions sent with order. One thousand tubers plant one acre.

Price, \$10 per 1,000 tubers; \$1.50 per 100.



Duck Potato
(*Sagittaria latifolia*)

Southern Grown Plants

Alligator Lily Plants	\$30.00	per 100
Bladderwort Plants	20.00	per bu.
Southern Blue Iris Plants	15.00	per 100
Salt Marsh Bulrush Plants	15.00	per 100
Southern Naias Plants	10.00	per bu.
Cutrice (So. Wild Rice) Plants	25.00	per 100
Liverwort, Duckweeds	20.00	per bu.
Egyptian Lotus Plants	75.00	per 100
Parrots Feather Plants	10.00	per 100

A TRUE FISHERMAN

The **American Forest Life** gives us this:

"Doin' any good?" asked Jim Gilgore, looking over the rail of the bridge.

"Any good?" answered the fisherman below. "Why, I caught 40 bass out o' here yesterday."

"Say, do you know who I am?" asked the man on the bridge.

The fisherman replied that he did not.

"Well, I'm the fish and game warden."

"Say," asked the fisherman, "do you know who I am?"

"No," replied the officer.

"Well, I'm the biggest liar in the country."

GRAY DUCK MOSS

A natural Louisiana fresh water duck food. Wild Ducks eat all parts of this plant. It grows best in one to four feet of water on a rich bottom soil. Plants may be set out from April to November.

PRICE

One bushel plants \$12.50.

Five bushel lot @ \$11.00 per bu.



FROGBIT

(*Limnobium Spongia*)

Wild Ducks feed upon its seeds and tender shoots. It being a floating plant makes excellent cover for game fish. Frogbit is a typical southern plant and thrives in either sunny or shaded areas. It floats upon the surface of fresh water ponds or sloughs sending out runners with plants forming every few inches. The plants are easily planted, just drop them here and there in the waters where they cannot float away. Plant from March to December, using 500 plants to the acre bed.

PRICE

100 plants	\$ 6.00
1000 plants	40.00

PREDICT—GOOD DUCK CROP

Rains last year in the great Canadian wild duck factory gave us the biggest crop of wild ducks in recent years. The National organization of wild fowlers, Ducks Unlimited, Inc., contributed liberally to this increase in wild ducks. A brief survey of present conditions indicate that the drought situation is on the outward cycle and that this year will bring us an even greater number of wild ducks, thus improved sport.

WM. O. COON, Naturalist.

WATER DOCK SEED

(*Rumex*)

A wild duck food for very shallow waters, wet margins of lakes or streams. Also grows well in low-lands dry in summer and flooded in duck season. Water Dock Seed resembles buckwheat seed. Just start a small bed here and there about your duck grounds and it will spread the following year. Seeds are planted from August through December.

PRICE

75c per pound of seed.



Redhead (*Nyroca Americana*)

WATER SHIELD

Sometimes called *Brasenia* is an important wild duck food. Only during the last few years have we been able to grow sufficient quantities to supply the demand and thus list it in our literature. Wild Ducks like the tender shoots and hibernating buds of the Water Shield as well as its seeds. It has a very strong root system almost indestructible by carp. Water Shield grows from the far north to the extreme south. It grows best in waters from one foot to five feet in depth on a mud bottom. Fresh waters, lakes or ponds are most suitable for its growth.

Water Shield has small round leaves, like pond lilies (about 2 inches across) and make wonderful cover for game fish. Roots are planted from February through November. One thousand Roots will plant an acre.

PRICE

Water Shield Roots \$3.50 per 100

Water Shield Roots \$25.00 per 1000.

Complete planting instructions sent with each order.

BROWNLEAF PONDWEED

(*Potamogeton Natans*)

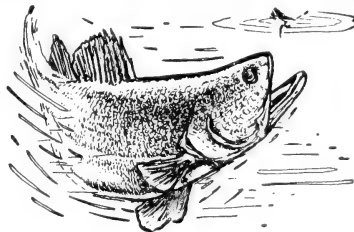
Diving Ducks eat the brittle roots of this important Wild Duck Food. Shallow water Ducks feed on its wheat-like seeds at the waters surface. It is very hardy, grows in from one to six feet of water on either soft or firm bottom. Easily planted. Plant during spring months.

Brownleaf Pondweed is also valuable as a food and cover plant for game fish. Such as Blue Gills, Perch and Crappie always linger in the Brownleaf beds.

1000 roots plants one acre.

PRICE

Brownleaf Pondweed Roots \$30 per 1000.



NAIAD—Bushy Pondweed

The Naiad or Bushy Pondweed is an important wild duck food, all parts of the plant are eaten by them. It grows in waters ranging in depth from 1 foot to 6 feet, on either sand, clay or mud bottom. Naiad is a strictly fresh water plant. It grows entirely submerged, seldom ever exceeding one foot in height and makes a sort of soft green carpet of moss over the bottom.



Naiad

This plant is considered very important as a food, cover and oxygenating plant for game fish. It also helps clarify the water.

Plants containing seed should be planted during August to November. They are easily planted by mixing them with clay and broadcasting into the water. Four bushel plants an acre.

PRICE

Naiad with seeds \$5.00 per bu.

SWEET FLAG—WATER IRIS

Both the Sweet Flag and Water Iris are important food and cover plants for Muskrats. They are also important cover for waterfowl and provide excellent

nesting places. Roots may be planted during spring in wet low lands or marshy places.

1000 Roots \$25.00; 100 Roots \$3.00.

WATER CRESS

The Water Cress is used largely by breeders of Wild Ducks, who consider it very valuable as a food plant for their Duck Farms. It grows very rapidly.

WHEN, WHERE AND HOW TO PLANT

Water Cress may be started by transplanting plants from April to July. It grows in cool waters, usually where there is a slight current, like in springs, brooks, small streams or shallow ponds. In transplanting plants simply set them out by hand in shallow waters 1 foot or less in depth. Use 1000 plants for one acre.

Water Cress Plants \$3.00
per 100.



Water Cress

PICKEREL PLANT

(*Pontederia Cordata*)

A good natural wild duck food, also important as a cover plant for game fish, very beautiful and most hardy. Seed of the Pickerel Plant which are produced quite abundantly are eagerly sought by the wild ducks. Pickerel Plant is distinct in its spike of bright blue flowers and its lance-shaped or heart-shaped leaves with round bases, it resembles both the Wampee Duck Corn and Wapato Duck Potato. It grows best in mucky soil in shallow ponds, streams and marshes of fresh or slightly brackish waters. Root stock can be planted from March first through July with very good results, 500 roots will plant one acre. Easily planted, just set the roots in the soils in shallow waters. Southern and northern grown varieties.

Price 100 Pickerel Plants, \$8; 500 Pickerel Plants, \$35.



THREE-SQUARE RUSH

(*Scirpus Americanus*)

Of about 150 different rushes belonging to the Scirpus family, the Three-Square Rush is the most important wild duck food. It produces a sizeable cluster of meaty seeds which the shallow water ducks are very fond of. It also makes good blinds for the hunter. Three-Square Rush gets its name from the three-sided or triangle-shaped stock.

The Three-Square Rush grows well on sandy soils on lake margins or along streams. It grows in marshes and firm rich soils as well as sand. Just wet soils at the water's edge are ideal, or in waters to one foot in depth, never deeper. It grows in either fresh water areas or in brackish or moderately alkaline places. In ordering specify for salt or fresh waters.

Roots or young plants of the Three-Square Rush are set in the soil any time from March through July, just a small cluster of 100 plants here and there. One thousand roots will plant an acre.

Seeds in Fall,
\$.75 per lb.

Price, Three-Square Rush
Roots, 100 \$4; 500 \$18; 1000 \$35.

COVER PLANTS

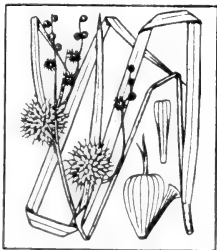
BURREED

Is a valuable plant to have growing in your marsh. Seeds which resemble kernels of corn, shell from the large prickly burr during fall and are eagerly eaten by Marsh Ducks.

Burreed grows from 3 to 5 feet in height and during early summer makes ideal nesting places for the Wild Ducks, also provides blinds for the hunter during fall.

CATTAILS

These plants grow to be 5 to 7 feet high and make good blinds. Cattail plants rank very high as a food, also cover plant for the Muskrats.



Burreed (Sparganium)

REEDGRASS

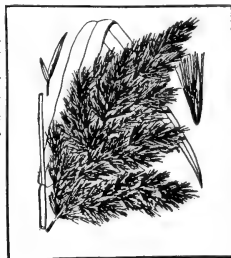
Makes the very best blinds for hunters. It grows from 5 to 8 feet with numerous long narrow leaves, during late fall in the North, Wild Ducks will seek shelter from the cold winds among the Reedgrass. It is also of importance for the Muskrat.

BULRUSH

The Bulrush will grow in waters having very sandy bottoms where other vegetation cannot be grown. It provides excellent blinds for the hunter and good shelter for the Ducks.

WHEN AND WHERE TO PLANT

The Burreed, Cattail and Reedgrass grow best on a fairly rich soil either on wet lowlands or in waters from 1 to 18 inches in depth. Bulrush will grow on any kind of bottom except stone, in waters from 1 inch to 3 feet in depth. The roots of these plants should be transplanted during May thru August.



Reedgrass (Phragmites)

HOW TO PLANT

Slip on your boots, take a spade or digging shovel and a quantity of roots to the place you are going to plant. In the shallow waters about three feet apart, take up a shovel full of soil and place 1 root in each hole, then replace the soil and press it firmly into place with your boot. One Thousand Roots will plant one Acre.

PRICE

\$3.00 per 100 Roots.
\$25.00 per 1000 Roots.

MUSKGRASS

A few bushels of Muskgrass planted during late summer or fall will produce an excellent feeding place for the Wild Ducks the following season. They feed upon the foliage as well as the many small tubers which are produced. Both Marsh Ducks and Diving Ducks feed upon Muskgrass. One will also increase the sport with rod and reel, for Muskgrass is a valuable food and cover plant for fish.



Muskgrass (Chara)

Broadcast bits of the plants containing (oogonia) seed spores upon the waters anytime from July to December. Muskgrass grows in fresh or alkaline waters from 2 to 12 feet in depth on almost any kind of bottom. One requirement is that the waters contain some lime which will be indicated by shells or shell bearing creatures such as snails or clams in the waters. Four Bushels will plant an Acre.

PRICE

Muskgrass Seed Spores

\$2.50 per bushel.

SOUTHERN LOWLAND RICE

An excellent Wild Duck food for places having just moist soil in summer and flooded in duck season. Mallards and Sprig are most fond of it. Grows only in a warm climate. Plant in the spring of year and it will make feed for the following fall.

We suggest tilling the soil if possible before planting. Use about 25 pounds to plant an acre.

Price \$15.00 per 100 pounds

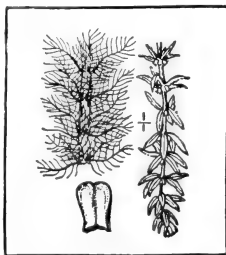
Less than 25 lbs. at 20c per pound



Shoveler or Spoonbill (Spatula Clypeata)

WATER MILFOIL

An excellent plant for fish ponds. Water Milfoil supports numerous kinds of animal life which is food for the fish. It furnishes cover, also shades the under water and purifies it, thereby, keeping it cool and fresh during hot summer. It is also of value as a waterfowl food.



Water Milfoil
(*Myriophyllum* Sp.)

PRICE

Water Milfoil Plants
\$3.50 per Bushel.
\$3.00 per bu. in 10 bu. lots.

WIGEONGRASS

Redheads, Bluebills and Canvasbacks feed upon the roots, seeds and leaves of Wigeongrass. It is considered the best Wild Duck Attraction for brackish waters. Mallards and other marsh ducks feed upon Wigeongrass during low tide where it grows in bays and streams which are affected by tides.

WHEN AND WHERE TO PLANT

Water Milfoil plants are transplanted during June and July. It produces most satisfactorily in fresh waters from 3 to 9 feet in depth on a mud bottom in slow running streams or sheltered bays and coves.

Wigeongrass plants are also transplanted during May to August and is a brackish water plant. It grows in salt water but never in that of full ocean strength. It thrives in rivers affected by ocean tides. This plant grows in waters from 1 to 10 feet in depth on a mud bottom.

HOW TO PLANT

Both the Water Milfoil and Wigeongrass plants are planted by simply pushing the roots of the plant down into the mud with an oar or a paddle in two to six feet of water.

Three bushels of plants to the acre.



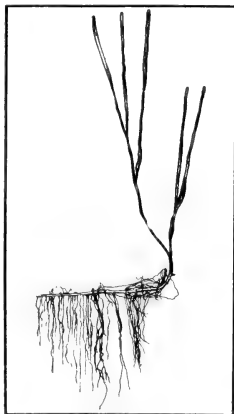
Wigeongrass
(*Ruppia Maritima*)

Wigeongrass Plants

\$8.00 per Bushel.
\$7.00 per bu. in 10 bu. lots

SALT WATER EEL GRASS

The Eel Grass is one of the important Wild Duck food plants which we supply that will grow in waters which are salty. All kinds of Wild Ducks will feed upon the seeds and foliage.



Eel Grass
(*Zostera Marina*)

WHEN, WHERE AND HOW TO PLANT

Plants of the Eel Grass are transplanted during June or July in quiet, shallow salt waters covered at low tide. In transplanting these simply set them out in shallow waters during low tide by making a hole in the soil and placing the roots in it; then replace the soil pressing it firmly about the plant.

Price \$12.00 per bushel.

\$11.00 per bu. 5 bu. lots.

SALICORNIA

For Tide Waters (Salt)

A real salt water duck food. Due to the glassy appearance of the stems it is called Glasswort. The plants are leafless but have numerous joints of the stems. Glasswort also thrives in strong alkaline waters. It produces abundantly of seed which the wild ducks are very fond of. Mallard, Blackducks and Sprig in particular like it, but all species of wild ducks eat it.

Salicornia or Glasswort may be planted during April to November by placing the plants in the soil in the desired place. It grows well on any fairly good soil, places exposed at low tide and covered at high tide, or very shallow alkaline waters. Three bushels will plant one acre, an acre will provide an abundance of duck food and spread to other suitable nearby places. Plant several small beds.

This plant has long been known as a good duck food, but until now has not been on the market or available for replanting.

Salicornia Plants \$8.00 per bushel.

FOR WILD DUCKS, QUAIL OR GROUSE

DUCK WHEAT

Or Goose Buckwheat is a very rapid growing plant. It produces an abundance of seed which Wild Ducks and Geese are fond of. Most favorable results are obtained when seed is planted in June or July on places which go dry or can be drained during summer and flooded during the duck season.

MILO MAIZE

This plant is used in the same manner as Duck Wheat and is planted about the same time under similar conditions. Both Quail and Grouse are very fond of the Wild Buckwheat and Milo Maize, plant a little space here and there in the waste places.

HOW TO PLANT

Break the soil, with a plow, disc or drag, then broadcast the seed using about 50 pounds to the acre and drag or rake the planted area to cover seed.

Price \$10.00 per 100 pounds.

CHUFA, NUTGRASS

A very good all around duck food for places which are very dry in summer and flood during the duck season. Chufa does particularly well in the South and may be planted anytime from March to July. One bushel of the nut-like tubers will plant an acre. In planting break the soil, then broadcast the tubers and rake or drag planted area to cover tubers.

Chufa Tubers \$11.00 per bu.
—45 lbs.

UNITED STATES GOVERNMENT
INDORSES THESE
DUCK FOODS

Technical Bulletin No. 634 published in March, 1939, called *Food of Game Ducks in the United States and Canada*, now on sale at 40c each by the Superintendent of Documents at Washington, D. C., lists these various foods, described in this book, tells of their value and propagation, and illustrates many of them. It's a worthy publication to every wild-fowler.



Chufa
(*Cyperus Eschlentus*)

TREES, SHRUBS & VINES

IMPORTANT FOR UPLAND GAME BIRDS
AND ANIMALS



TREES

Pin Cherry (4-8 feet high)	\$2.00	each
Hackberry (1-1½ inch base)	6.00	"
Hawthorn (3-5 feet high)	2.80	"
Wild Crab (3-4 feet high)	2.00	"
Mulberry (2-3 feet high)	2.20	"
English Oak (6-8 feet high)	8.00	"
Pussy Willow (4-5 feet high)	1.20	"
Red Cedar (2-3 feet high)	8.00	"
Scotch Pine (2-3 feet high)	4.00	"
Douglas Fir (2-3 feet high)	3.00	"
Beech Nut (2-3 feet high)	5.00	"

SHRUBS

Hazelnut (18-24 inches)	1.00	"
Honeysuckle (3-4 feet)	1.20	"
Chokecherry (3-4 feet)	1.60	"
Smooth Sumac (3-4 feet)	1.00	"
Mountain Currant (18-24 inches) ..	1.10	"
Wild Rose (18-24 inches)	1.50	"
Swamp Rose (2-3 feet)	1.30	"
American Elder (3-4 feet)	1.40	"
Buffalo Berry (2-3 feet)	1.20	"
Snow Berry (2-3 feet)	1.00	"
Nanny Berry (3-4 feet)	1.60	"

VINES

Bittersweet (2 years)	1.00	"
Wild Grape (2 years)	1.00	"
Raspberry Plants	2.50	doz.

NOTE—Trees, Shrubs and Vines listed above are important as food producers and cover plants for Upland Game Birds and Animals. Prices are F. O. B. Nurseries. No orders accepted for any quantity or assortment amounting to less than \$10.00.

RINGNECK PHEASANTS

This popular species of pheasant likes the open fields adjoining that low marshy area best. They like to be near water in a thick weed growth where food is plentiful. About the open grain fields which are bordered by low growing shrubs that make fine cover, a place to hide in safety. Leave a border of shrubs and weeds along that fence line.

QUAIL



These little old game birds are the pride of any sportsman's bag. They like the open field with clumps of shelter in the form of low shrubs covered with vines. Twice daily these game birds like to go to the nearby pond, stream or water hole and like to linger and feed on the weed-seeds and berries that grow nearby.

HISTORY OF GAME FOOD PLANTING

For many years we have labored under the impression that in our time and here at Oshkosh, Wisconsin, that the idea of planting natural wild game foods was originated. We are now informed by one of our customers that ours was only a revision of the idea which he states that according to Marco Polo's travels was carried on many years ago by an Egyptian Ruler on his favorite hunting ground.

NATURAL FOODS

Following are listed several of the important field seeds that provide food for both quail and pheasant. Prices given are f. o. b. point of shipment and subject to the same discount as allowed on aquatic planting materials.

PRICES

	Per 100 lbs.	10 lbs.
Lespedeza Clover Seed	\$20.00	\$3.00
Wild Poppy Seed	35.00	4.00
Canary Seed	21.00	3.00
Wild Millet Seed	15.00	2.00
Bird Thistle Seed	35.00	4.00
Large Dwarf Rape Seed	21.00	3.00
Smartweed Seed	15.00	2.00
Sunflower Seed	15.00	2.00
Whole Flax Seed	20.00	3.00
Hairy Vetch Seed	24.00	3.50
Dwarf Milo Maize Seed	15.00	2.00
Wild Buckwheat Seed	15.00	2.00

There are but three fundamentals that concern wildlife of every kind, they are: **To Find Food, Protection From Enemies and To Reproduce.** Make your place attractive and you will enjoy plenty of game and lots of sport.



How To Get More Ducks

If Jack Miner, with nothing but a brick yard pond, a few live decoys, plenty of food and a lot of perseverance can bring thousands of geese from all points of the compass, surely you can materially increase the waterfowl supply on your waters.

Because a place is not in the beaten path of the large regular waterfowl flyways is no excuse for hesitancy. Mr. Miner's experience shows that the ducks and geese will go many miles out of their way to get a good meal at a cafeteria that is properly safeguarded against intruders.

Many Sportsmen have been planting duck foods in suitable waters, and the results have been good. If the duck hunters want more ducks they must also get busy and do a lot of duck food planting, lake building, creating refuges, etc.

Facts About Duck Marshes

There are millions of acres in this country that have been drained to make farming lands. Much of it would be worth more today if in its original state. There is more money in one hundred acres of good duck marsh than there is in an equal acreage of corn. The duck marsh properly handled will exceed the profit of the average farm land.

To attract wild fowl to your marsh lands you must take means to conserve a sufficient amount of water, plant the food on which they thrive, provide suitable cover and protect them from their natural enemies. This will attract the birds and you can hold them if the food holds out and you do not shoot too heavily. The investments that are made in this direction will be well repaid.

Don't cheat. The man who illegally takes game or fish robs his fellow man and defrauds his state. He robs posterity of its rightful heritage. It is the duty of every citizen to report violations of fish and game laws and to endeavor to cause the erring brother to see the error of his ways.

Aquatic Plants and Percentage of Each Eaten by the Best Known Wild Waterfowl

This list compiled by us from data obtained from bulletins published by the U. S. Department of Agriculture, Bureau of Biological Survey, Washington, combined with knowledge gained by the examination of the contents of stomachs of wild waterfowl, taken from different sections of U. S. and Canada.

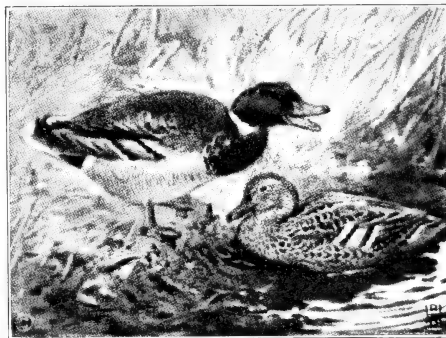
MALLARD	PINTAIL	BLUEBILL	REDHEAD	TEAL Blue-Winged
10% of Food Animal	Known as Sprig	15% of Food Animal	14% of Food Animal	27% of Food Animal
90% of Food Vegetation	13% of Food Animal	85% of Food Vegetation	86% of Food Vegetation	73% of Food Vegetation
22% Sedges	28% Pondweeds	31% Wild Celery	30% Wild Celery	22% Sedges
Cyperus	Brownleaf	15% Pondweeds	17% Pondweeds	Cyperus
Rushes	Redhead Grass	Sago Pond Plant	Sago Pond Plant	Rushes
Burreed	Sago Pond Plant	Naiad	Naiad	Chufa
Chufa	Eel Grass	Redhead Grass	Redhead Grass	Wampee
Wampee	Wigeongrass	Brownleaf	Brownleaf	16% Pondweeds
14% Grasses	Naiad	Eel Grass	Eel Grass	Sago Pond Plant
Wild Rice	22% Sedges	Wigeongrass	Wigeongrass	Naiad
Wild Millet	Bulrush	9% Muskgrass	9% Wapato and Delta	Redhead Grass
9% Smartweeds	Three Square Rush	7% Wapato and Delta	Duck Potato	Brownleaf
Duck Wheat	Chufa	Duck Potato	5% Duckweeds	Eel Grass
9% Pondweeds	Wampee	5% Duckweeds	5% Muskgrass	Wigeongrass
Sago Pond Plant	11* Grasses	4% Coontail	6% Grasses	14% Grasses
Naiad	Wild Rice	4% Grasses	Wild Rice	Wild Rice
Redhead Grass	Wild Millet	Wild Rice	Wild Millet	Wild Millet
Brownleaf	7% Smartweeds	4% Sedges	6% Sedges	9% Smartweeds
Eel Grass	Duck Wheat	Cyperus	Syperus	Duck Wheat
Wigeongrass	5% Muskgrass	Rushes	Burreed	4% Muskgrass
6% Duckweeds	4% Delta and Wapato	Burreed	Wampee	2% Waterlily
Duck Meat	Duck Potato	Chufa	4% Waterlily	Banana "
6% Coontail	3% Waterlily	Wampee	Banana "	Yellow "
5% Wild Celery	Yellow "	2% Waterlily	Yellow "	Wokas
4% Hackberries	Wokas	Banana "	Wokas	American Lotus
4% Wapato and Delta	American Lotus	Yellow "	American Lotus	1% Water Milfoil
Duck Potatoes	1% Duckweeds	Wokas	1% Water Milfoil	1% Burreed
3% Acorns	1% Milfoil	American Lotu	1% Coontail	4% Unidentified and
4% Waterlily	1% Wild Celery	1% Water Milfoil	16% Unidentified and	Miscellaneous
Banana "	4% Unidentified and	3% Unidentified and	Miscellaneous	
Yellow "	Miscellaneous	Miscellaneous		
American Lotus				
3% Water Milfoil				
1% Muskgrass				

CONTINUED FROM PAGE 34—

This is the average percentage of goods covering a large territory and wide range of growing conditions, which may vary in different localities where some plants grow more abundantly than others.

BLACK DUCK	CANADA GEESE	CANVASBACK
24% of Food Animal 76% of Food Vegetation	3% of Food Animal 97% of Food Vegetation	8% of Food Animal 92% of Food Vegetation
33% Pondweeds Sago Pond Plant Naiad Redhead Grass Brownleaf Eel Grass Wigeongrass	29% Grasses Wild Rice Wild Millet	38% Wild Celery 18% Pondweeds Sago Pond Plant Naiad Redhead Grass Brownleaf Eel Grass Wigeongrass
11% Grasses Wild Rice Wild Millet	24% Sedges Cyperus Rushes Burreed Chufa	8% Wapato and Delta Duck Potato
9% Sedges Bulrush Burreed Cyperus	12% Wapato Some Delta	6% Waterlily Banana " Yellow " American Lotus
6% Smartweeds Duck Wheat	8% Smartweeds Goose Buckwheat	6% Muskgrass
5% Waterlily Banana " Yellow " Wokas American Lotus	5% Wild Celery	5% Grasses Wild Rice Wild Millet
2% Coontail	4% Pondweeds Sago Pond Plant Naiad Redhead Grass Brownleaf Eel Grass Wigeongrass	5% Sedges Cyperus Rushes Wampee
4% Wapato and Delta Duck Potato	2% Coontail	1% Coontail
3% Wild Celery	1% Wampee	1% Water Milfoil
1% Muskgrass	11% Elodea	1% Duckweeds
2% Miscellaneous	8% Upland Plants and Grains	3% Unidentified and Miscellaneous
	2% Miscellaneous	

MORE FOOD— MORE DUCKS— BETTER SHOOTING OVER THE ENTIRE SEASON

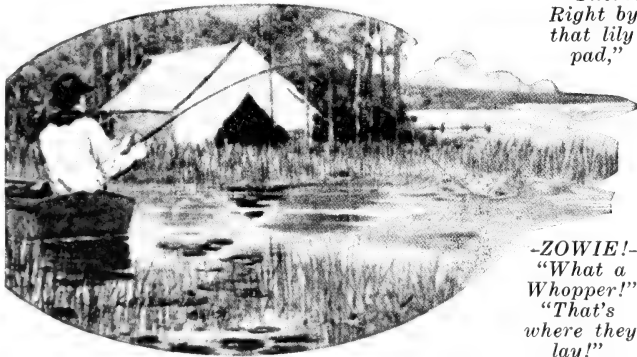


Mallard (*Anas Platyrhynchos*)

Importance of Aquatic Vegetation for Game Fish

Many of the same plants which are important food plants for waterfowl are also important food and cover plants for game fish. Therefore, one will improve both hunting and fishing by establishing a growth of aquatic vegetation in that lake, pond or stream.

Plant life takes a very important part in the purification of waters by taking up the poisonous carbon dioxide gases given



*"There!
Right by
that lily
pad,"*

*—ZOWIE!—
"What a
Whopper!"
"That's
where they
lay!"*

off by soil decomposition which asphyxiate fish life, and sending forth in its place the oxygen into the waters which is so essential to fish life. These plants also support countless numbers of minute animal life upon which the young fry are dependent for their feed. They also provide excellent shelter and hiding places for the younger fish to hide and escape the larger ones which are of a cannibalistic nature, feeding upon their smaller kin.

Food, protection and better living conditions for the small fish mean that many more grow to maturity, thus more fish, larger fish, healthier fish and better fishing.

Aquatic vegetation also assists in the clarification of the waters. It binds the soils and prevents turbid water, also collects the floating particles of sediment. It shades the under waters keeping them cool which is very helpful and healthful to the fish life; also provides better spawning beds.

In order that there be a plentiful supply of fish in any waters it is first necessary to protect the small fry. They cannot feed upon the larger insect life or upon one another as the larger fish do and as a result in waters barren of aquatic vegetation millions of the small fish perish unbeknown to you.

Sunlight Found Harmful To Fish and Fish Eggs

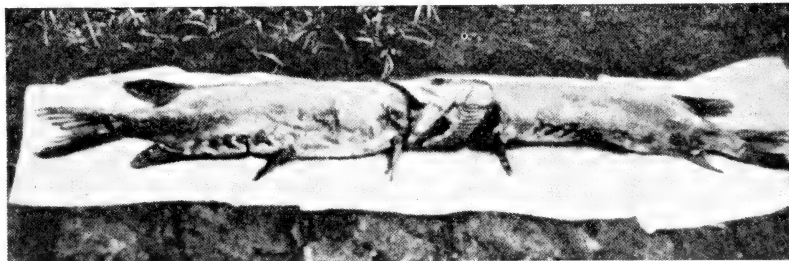
As a result of experiments at its Holden, Va., hatchery, the Bureau of Fisheries, Department of Commerce, has found that exposure to sunlight is detrimental to eggs, fry and fingerlings.

The experiments, it was stated orally on November 4, were designed to determine whether the remarkable curative results ascribed to ultra-violet rays and sunlight were actual. The bureau found that the doubts of fish culturists on this score were

well founded, continuous exposure to direct sunlight being found as not only of no benefit but definitely harmful to eggs and young fish.

Plants Important to Game Fish

In the pages of this booklet as indicated here will be found description of the following species of plants that are important to game fish. What, when, where and how to plant them, also prices are given after the description of each plant. Here are those plants important to game fish.



A case where eyes are bigger than stomach.
—Courtesy Field and Stream.

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WHAT CONSTITUTES A GOOD GAME REFUGE



It is a common error that national, state and municipal forests are per se good game refuges. President John B. Burnham of the American Game Protective Association points out, that this is not necessarily true. In order to serve any good purpose as game refuges forests must be attractive to wild animal and bird life. They must contain food as well as shelter.

The tendency in management of public forests is to plant and promote the growth only of such trees as will in time make merchantable timber, with no thought of such other free growth, shrubbery and

other plant life as is necessary to an attractive home for birds and animals.

Game cannot live without food. "The reason," says Mr. Burnham, "why many game refuges are absolutely worthless (aside from the question of vermin control) is that, to put it figuratively, they provide only a safe house, with no kitchen and no order in the grocery store. You cannot expect wild animals and birds to flock to foodless refuges just because they are planted with commercially attractive trees. Of the conifers, hemlock, white cedar and balsam, when small, furnish food for deer and hares in the Winter season. Pine has practically no food value and spruce none whatever. In summer even deer and rabbits will find nothing they can eat in a typically planted forest."

Mr. Burnham points out that for every coniferous tree planted there should be a number of deciduous trees—including fruit and nut-bearing trees. Game wants sunlight, too, and plenty of it. So openings and gaps in the forest must be left which will encourage undergrowth. At least half of the forest area should be left unoccupied by commercial trees if it is to be a good game refuge.

Quoting again from Mr. Burnham: "We should let Mother Nature have something to say as to what happens on this 50 per cent of so-called wasteland. There is nothing more valuable for our primary object than weeds and berry briars, sumachs, wild apples and grapes, barberries and thorn apples, and

where Nature leaves the ground bare give her the benefit of the doubt and believe that she may know something after all. Partridges need places to dust and wild grasses and plants are important in the game's dietary. Some refuges should have no forest at all. We must not forget the wild grass swamps for pheasants.



Natural Muskrat Foods

Listed here are the aquatic plants important as Muskrat Foods, all of which are listed with prices and description of growth and water conditions required, in this booklet.

	Page		Page
Wild Rice	6	Sweet Flag	24
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INFORMATION FOR THE MUSKRAT FARMER

Man has been engaged in the trapping of fur-bearing animals since the early ages. The women of the stone age wore furs as clothing, the modern women wear furs, not alone because of the warmth, but for the beauty and their personal adornment. Trappers, spurred by high prices, have ruthlessly depleted the wild supply. The drainage and reclamation of swamp lands have destroyed the breeding grounds of millions of muskrats. So, if we are to have a dependable supply of fur, they must be raised. Statistics compiled by Frank G. Ashbrock of the U. S. Biological Survey, show that the muskrat is the most important of all fur bearers. More than fifty per cent of all fur used today is muskrat. His glossy pelt is not only used in its natural state, but when dyed is sold as Hudson seal, river mink, southern beaver, neutria, otter, sable and many other popular furs. For the past few years the demand for muskrat pelts has exceeded the supply by from fifteen to twenty million pelts. The result of this demand has prompted the commercial raising of this little fur bearer, by some of our largest manufacturing furriers and far-sighted individuals. Muskrat farming is a business, the same as banking, manufacturing or mining. It is as practical as the

raising of sheep, cattle or hogs, the difference being that it is ten times as profitable.

To successfully raise muskrats one must have a spring-fed marshy swamp with an outlet which can be dammed, so that a uniform water level may be maintained. The depth of the water and musk, or floating bog, must be sufficient so that it will not freeze to the bottom in the most severe Winter, the result of which would be cutting off of the food supply and the starvation of the animals, unless artificially fed. The swamp lands must abound in the natural foods of the muskrat, such as cat-tails, bulrushes, duck millet, three-blade grass, wild rice, wapato and wild celery. The location must also have high dry ground surrounding the swamp on which fences are built. Proper fencing is of importance. A crop of root vegetables, such as carrots, parsnips and sugar beets, should be planted, stored in root cellars and fed during the Winter months, by using feeding houses. On ranches where the muskrats are in the habit of using the feeding houses, the rancher has the opportunity of scientifically feeding during the breeding season, which results in a larger number of young litters. Another decided advantage of feeding houses is the ability to easily catch the animals. Trap doors are over the entrances; by closing them when one wishes to make a catch the muskrat cannot escape. This enables the rancher to market only prime pelts, which command the highest prices.

If a muskrat farm is ideally located, properly

fenced and well planted with natural foods, it is bound to be a money-maker. It is a never-failing crop, unaffected by hot, cold, wet or dry weather.

Muskrats are hardy and immune from diseases. They multiply rapidly, being the most prolific of fur bearers. U. S. Government Bulletin 869 states that from actual observation one female produced thirty-three young in one breeding season. An interesting experiment has recently been concluded in Manitoba. A pair of muskrats were put into a pen and in nine months they and their progeny increased to the astounding total of 138.

It has conclusively been proved that the young female born in the Spring will produce the same Fall. We have had increases of a second litter in the Fall from a female born in the Spring; this, however, is unusual. The next Spring she has the average litter, which is eight or ten young.

—Courtesy American Field.

WHAT OTHERS SAY—

Wis. Aquatic Nurseries,
Oshkosh, Wis.
Gentlemen:

May 13, 1939

You may be interested that the planting we made of your materials last year was very successful.

Thanking you for your very courteous services, I am
Yours truly,

ROBERT OGDEN

Montgomery, Alabama, Dec. 1, 1927

Wisconsin Aquatic Nurseries
Oshkosh, Wisconsin

Dear Sir:

Atten.: Mr. Coon:

Your letter has just reached me. Would have been glad to meet you while in Montgomery. Would have been delighted to have had you inspect our lake. The greatest trouble with planting anything in this lake is the various growth. The soil is very rich, grows all kinds of moss and other water plants. The moss is the great trouble, it is so dense it is hard to get any kind of seed down to the soil. However our WILD RICE grew fine, our SPATTERDOCK and LOTUS WATER LILY are well set, made a fine crop this year.

To show what NATURAL FOOD will do, we have ten Wild Ducks now to every one last year. If we can just get some other plants well set, we will have the greatest duck lake in this country.

We have so many ducks now I believe they would destroy the tubers if we were to plant more. I know they would get most of them. How about spring planting? How late can Muskgrass and Sago Pond Weed be planted successfully? Will give you an order for some of both at the right time.

Very truly yours,

JFY:S

(Signed) J. F. YARBROUGH

Wisconsin Aquatic Nurseries
Box 331, Oshkosh, Wis.
Gentlemen:

On behalf of the members of the Lake Nokomia Fish and Game Club I want to thank you for the wonderful assortment of plants which you shipped us. They certainly were the best ever. I am positive no one has ever received any better. While the assortment was not large I am in hopes that the results from these plants will be the very best. Certainly it will not be the plants fault if we do not get the results we expect to.

Again thanking you for past favor and for the wonderful spirit of cooperation you have shown in this matter, I am

(Signed) Lake Nokomis Fish & Game Club,
By Bert Harding, Secy.,
318½ 3rd St.
Wausau, Wisconsin.



Canada Guides Limited
606-607 Shaughnessy Bldg.,
Montreal, Que., Canada

January 28, 1933

Wisconsin Aquatic Nurseries
Oshkosh, Wis.
Gentlemen:

Enclosed please find my order for materials amounting to \$50.00 I forgot to mention in my last letter, but would like to say now, that the seed which we got from you in the Fall of 1931 and planted on our Hog Island property did very well indeed. We had a small fresh water creek in which we planted the wild rice and we were both surprised and pleased at the remarkable results obtained. All the other seeds did excellently.

Thanking you for past favors and trusting to receive copy of order with planting instructions, I am

Sincerely yours,

Signed: ROBERT McCOMBE

More Satisfied Customers

The Anglo California National Bank,
Of San Francisco,
Oct. 20, 1939

Wisconsin Aquatic Nurseries,
P. O. Box 331,
Oshkosh, Wisconsin

Dear Sirs:

Last spring I bought some of your various Wild Duck Feeds and they all did very well.

I see you have advertised that Sago Pondweed will grow in any kind of waters, except salt. If the Sago are to be planted within the next few weeks, how long does it take before the plant comes up.

Would you please also give me instructions how the Sago is planted.

Awaiting an early reply, I am,

Yours very truly,

(Signed) HERBERT FLEISHHACKER, Jr.

Wisconsin Aquatic Nurseries
Oshkosh, Wis.

West Barrington, R. I.
April 3, 1931

Gentlemen:

Enclosed you will find check which will pay for Rice seed I received. An experienced Hunter and Game Farmer helped me and he said, "It is the best I've seen from three orders I have received from different concerns I have dealt with." I also think it is very fine seed and I am sure of good results.

Yours for conservation,

Signed: WILLIS E. BLOUNT

THE FIRST NATIONAL BANK,
Huntsville, Texas, Feb. 15, 1928

Wisconsin Aquatic Nurseries
Oshkosh, Wis.

Two years ago we bought some Wild Rice Seed from you for our lake. It grew fine and we had a very nice stand. However, a few months later, a water spout broke our poorly constructed dam and we lost it. We now have it in good shape for standing severe strain and have concluded to plant some more Rice.

Kindly send me 25 pounds Wild Rice Seed for planting in our lake.

Signed: Yours truly,

G. A. WYNEE, Vice-Pres.



Testimonial Letters

Laurel Oil & Fertilizer Company
Laurel, Miss.

October 12, 1931

Wisconsin Aquatic Nurseries
Box 331., Oshkosh, Wis.
Gentlemen:

About eight weeks ago I bought quite a bit of seed, etc., from you gentlemen. Among this shipment was some of your Muskgrass seed spores.

All of the seeds furnished are quite satisfactory except the Muskgrass seems to be spreading awfully fast; in fact I think it is spreading entirely too much. As explained to you in my first letter, our Lake has about 120 acres of open water and I wondered if this Muskgrass will spread over the entire lake?

Will it lie down in the dead winter? How would you suggest that it be controlled?

For your information, we have quite a few ducks already coming in and they seem very fond of this Muskgrass as well as the Wild Rice, Wild Celery, Sago Pondweed, etc.

Very truly yours,

Signed: D. P. GRANBERRY,
Box 926, Laurel, Miss.

Wisconsin Aquatic Nurseries
Oshkosh, Wis.

Oct. 8, 1929

Gentlemen: Enclosed please find check for Wild Duck Food. Just writing a few lines to let you know about the results obtained from your Wild Rice and Wild Celery I purchased from you last fall. Up to the time it was seeded there was never a duck on the pond to my knowledge. About a week ago there were about thirty ducks on it of which we killed five and I believe that the Wild Duck Food sure was what attracted them. I am going to seed another pond this fall.

Signed: Sincerely yours, EMIL GILLHAM,
R. 2, Box 93, Gair Grove, Mo.

Wis. Aquatic Nurseries,
Oshkosh, Wis.

Dear Sirs:

The Wild Rice Seed I got from your Company last fall is doing fine. I will send you another order a little later, as soon as I have made the necessary arrangements.

Yours truly,

W. C. WALLACE.
Errol, N. H.

May 6, 1926

Wisconsin Aquatic Nurseries
Oshkosh, Wis.

Dear Sirs: Enclosed please find my check for \$21.00 for which you will please send me at once 1000 Wapato Duck Potatoes. You shipped me some last year and they did very well.

On February 10 you sent me 500 Sago Pondweed Tubers which are coming fine.

Trusting that you will express the above at once, I am

Sincerely yours,

CARL G. LIEBE.
545 E. 14th St., N., Portland, Oregon

Wisconsin Aquatic Nurseries
Oshkosh, Wis.

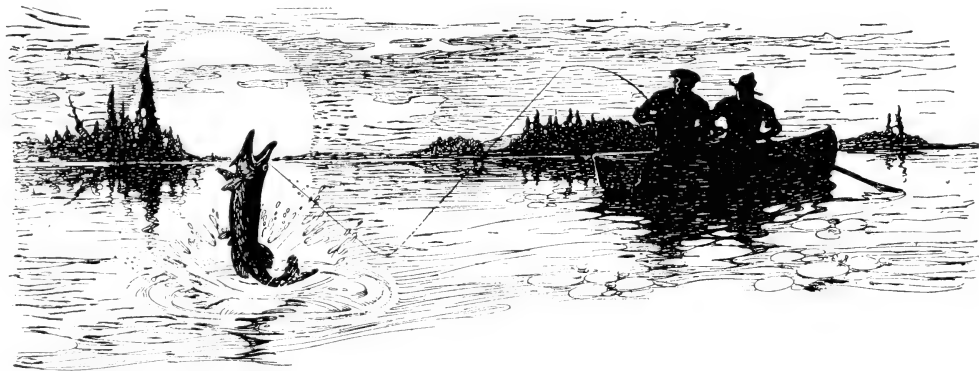
Dear Sirs:

Enclosed please find check for Wild Rice Seed. I want to thank you for your promptness in getting your orders out and for the extra seeds and plants that you sent with my order of the 17th of April. Your firm surely lives up to their guarantee about making good any order that is not satisfactory and in the future I can't speak too highly of your fair and square dealings.

Yours very truly,

Signed: W. F. STEINBECK.
1963 N. 5th St.,
Kansas City, Kansas

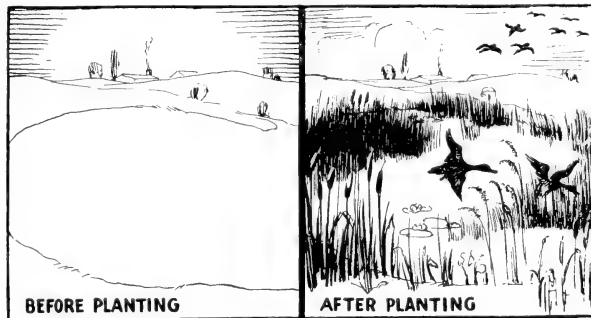
THIS IS THE LIFE—What a thrill to catch these big ones. Try your hand on this rod and lay the lure right at the edge of that weed bed.



PROFESSIONAL SERVICE

We Plan---Plant and Make Your Marshes, Ponds or Streams Attractive

The best method of procedure in developing an attractive feeding ground for either waterfowl, fish, or game is to employ the services of our expert to come and make a personal examination of the property and supervise the planting thereof. The owners of this firm are considered among the world's foremost experts in this work. We



will examine the soils, test the waters, identify the botanical growth, determine what will grow and where to plant it to make a paradise for game or fish. Where Leagues or Associations plan to develop several lakes or properties, Clubs or private individuals controlling large areas wish to make plantings to the extent of \$300 or more we recommend this service for best and quickest results.

Perhaps you now have some natural foods growing in your waters or about the shores unbeknown to you, this service will eliminate the danger of duplicating in planting. It will insure the planting of the proper plants adapted to those particular water or soil conditions. Experimental planting on a large scale is often very costly. One experienced in planting these materials can often make the same quantity cover twice the area, with better results than the inexperienced. Proper planting is very important, it is the hinge upon which good results hang.

By having this service you will learn what grows there, its value, what we recommend planting, quantity, price and where as well as when to plant. During spring we are able to make investigations of properties and waters and supervise the planting work in one trip by telegraphing for materials after survey is completed and awaiting their express arrival.

(Continued Next Page)

(Continued from Page 45)

We often have several such contracts in a community and work from one preserve to another.

Our charge for this service is based on the size of the area and its distance from Oshkosh. When we are able to obtain several contracts in one state it enables us to quote a special low price, making this service very inexpensive. Write us for quotation on this service, we may have an expert in your vicinity now.

TERMS

Prices listed herein effective January 1st, 1942, this list cancels all previous lists and quotations. These prices are F. O. B. Oshkosh, or other shipping points unless otherwise stated and subject to change without notice.

QUANTITY RATES: In lots of 250, 500 or 750 of roots, tubers or plants will be furnished at the 1000 rate; 50 of one kind will be furnished at the 100 rate.

We urge you to order early and be sure of your supply. Cash or satisfactory reference with order, if purchaser has no credit established with us. Shipments will be sent C. O. D. if so desired.

Accounts not paid when due are subject to sight draft also interest charged at the rate of 8% per cent per annum.

These aquatic seeds and other planting materials are perishable and must reach their destination in the shortest possible time and should be shipped by express. If you wish shipment by Parcel Post or Prepaid Express please send sufficient money to cover same otherwise we will ship charges collect.

Freight shipments can be made on dry seeds, shrubs and trees as listed. Wild Duck Millet, Smartweed, Chufa, Duck Wheat, Milo Maize and all items listed on pages 30, 31 and 32 for upland game birds.

For our reference write New American Bank, Oshkosh, Wis.; Department of Conservation, Harrisburg, Pa.; American Fisheries Society, Washington, D. C.; American Wildlife Institute, Washington, D. C.; Commissioner of Conservation, Indianapolis, Ind.; any outdoor sportsmen's magazine such as Field and Stream, Outdoor Life, Sports Afield, etc.

THE WISCONSIN AQUATIC NURSERIES

P. O. BOX 331
OSHKOSH, WISCONSIN, U. S. A.

—ORDER BLANK—

THE WISCONSIN AQUATIC NURSERIES, P. O. BOX 331, OSHKOSH, WISCONSIN, U. S. A.

Kindly Place My Order For the Following Items.

DATE.....1942

Order By

Ship to

Sign Name Here

Address

Address

Please Ship On By Express Parcel Post

Date

Quantity	Materials	Price
	Lb. Giant Wild Rice Seed	
	Wild Celery Tubers	
	Sago Pondweed Tubers	
	Wampee Plants or Seeds	
	Wapato Duck Potato Tubers	
	Lb. Wild Duck Millet Seed	
	Lb. Smartweed Seed	
	Bushels Ducksmeat Plants	
	Bu. Coontail Plants	
	Bu. Elodea Plants	
	Bu. Water Milfoil Plants	
	Bu. Muskgrass Seed Spores	
	Brownleaf Roots	
	Spatdock Plants	
	White Waterlily Roots	
	Lb. American Lotus Seed	
	Burreed Seed or Roots	
	Deep Water Duck Potato Tbrs.	
	Bu. Naiad with Seed	

Quantity	Materials	Price
	Water Smartweed Roots	
	Banana Waterlily Roots	
	Wigeongrass Plants	
	Frogbit Plants	
	Lbs. Southern Lowland Rice	
	Lbs. Water Dock Seed	
	Water Shield Plants	
	Pickereel Plants	
	Three-Square Rush Roots	
	Bu. Eel Grass Plants	
	Bu. Salicornia Plants	
	Lbs. Duckwheat Seed	
	Lbs. Chufa Tubers	
	Total	
	Less Discount	
	Amount of Order	\$

Inclose Check \$.....

Express C.O.D.....

TEAR OFF HERE

GUARANTEE

We guarantee our seeds, roots, tubers and other nursery stock to grow and produce satisfactory results. If a complete planting or any portion fail to produce what you consider a satisfactory growth after allowing a sufficient time to grow and mature, we will agree to furnish an equal quantity to that which fails at one-half the list price.

You are the judge as to whether or not your planting has proven a success. If dissatisfied with the results, tell us about it and we will replace the order at half-price, or an equal value of any other planting materials you wish to select from our list at one-half list price.

Failures with good germinating seed and hardy plants, tubers, shrubs, etc., such as we supply are few and far between. Marsh and water plants are very hardy and sure to grow.

Complete Planting Instructions Sent with Each Order

THE WISCONSIN AQUATIC NURSERIES

(Box 331)

OSHKOSH, WIS., U. S. A.

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